



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,866	12/11/2003	Daron Chris Hill	KCC 4978 (K-C 19,075)	8069
321	7590	10/19/2007	EXAMINER	
SENNIGER POWERS			ENGLAND, DAVID E	
ONE METROPOLITAN SQUARE				
16TH FLOOR			ART UNIT	PAPER NUMBER
ST LOUIS, MO 63102			2143	
			NOTIFICATION DATE	DELIVERY MODE
			10/19/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

uspatents@senniger.com

Office Action Summary

Application No.

10/733,866

Applicant(s)

HILL ET AL.

Examiner

David E. England

Art Unit

2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 11/22/2004

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Response to Arguments

1. Claims 1 – 41 are presented for examination.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 17 – 31 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 17 – 31 are rejected under 101 for claiming a program per se that is not embodied on any hardware to cause a processor to recognize the claimed subject matter. Applicant is asked to cancel the claims or amend so the claims may be in compliance with 101. See MPEP 2106.01.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1 – 41 are rejected under 35 U.S.C. 102(b) as being anticipated by Tunncliffe et al. (6272110), hereinafter Tunncliffe.

Art Unit: 2143

6. Referencing claim 1, as closely interpreted by the Examiner, Tunnicliffe teaches a method of maintaining capacity of a network comprising:

7. defining future times at which a capacity of the network is evaluated, (e.g., col. 4, lines 20 – 59);

8. determining a total capacity of the network (TNC) at each of the future times, (e.g., col. 4, lines 20 – 59);

9. determining a total demand of users (TUD) for the network at each of the future times, (e.g., col. 4, lines 20 – 59, col. 5, lines 4 – 55);

10. determining a predicted utilization (PU) of the network at each of the future times as a function of the total demand of users (TUD) and the total capacity of the network (TNC) , (e.g., col. 4, lines 20 – 59, col. 5, lines 4 – 55);

11. defining an acceptable utilization of the network at each of the future times, (e.g., col. 4, lines 20 – 59, col. 5, lines 4 – 55);

12. comparing the predicted utilization (PU) of the network to the acceptable utilization of the network at each of the future times, (e.g., col. 4, lines 20 – 59, col. 5, lines 4 – 55); and

13. determining in response to the comparing, for each future time, a change in network capacity (DCNC) to be applied to the network in order to increase or decrease the capacity of the network, (e.g., col. 4, lines 20 – 59, col. 5, lines 4 – 55).

14. Referencing claim 2, as closely interpreted by the Examiner, Tunnicliffe teaches the acceptable utilization comprises a maximum acceptable utilization (MaxAU) of the network and a minimum acceptable utilization (MinAU) of the network, (e.g., col. 3, lines 22 – 55).

15. Referencing claim 3, as closely interpreted by the Examiner, Tunncliffe teaches applying the determined change in network capacity (DCNC) to the network, (e.g., col. 4, lines 20 – 59, col. 5, lines 4 – 55).

16. Referencing claim 4, as closely interpreted by the Examiner, Tunncliffe teaches determining at each of the future times a lead time for adding product for applying the determined change in network capacity (DCNC) to the network , (e.g., col. 4, lines 20 – 59, col. 5, lines 4 – 55); and

17. in advance of each future time based on the lead time determined with respect to each particular future time, initiating efforts to obtain product for applying the determined change in network capacity (DCNC) , (e.g., col. 4, lines 20 – 59, col. 5, lines 4 – 55).

18. Referencing claim 5, as closely interpreted by the Examiner, Tunncliffe teaches the lead time is a function of an installation time for installing said product and an advance purchase time for obtaining said product , (e.g., col. 3, lines 22 – 55).

19. Referencing claim 6, as closely interpreted by the Examiner, Tunncliffe teaches determining a total capacity of the network (TNC) at each of the future times is a function of determining a present capacity of the network (PNC) and identifying a planned change in network capacity (PCNC) to be applied the network between a present time and each of the

Art Unit: 2143

future times , (e.g., col. 3, lines 22 – 55).

20. Referencing claim 7, as closely interpreted by the Examiner, Tunncliffe determining a change in network capacity (DCNC) is a function of one or more of the following:

21. a current utilization (CU) of the network, a growth trend of a utilization of the network, or a cost measure of a capacity to be added to the network , (e.g., col. 3, lines 22 – 55).

22. Referencing claim 8, as closely interpreted by the Examiner, Tunncliffe teaches said current utilization (CU) of the network is indicative of a high percent usage of a present capacity of the network (PNC) for a particular percentage of time , (e.g., col. 4, lines 20 – 59, col. 5, lines 4 – 55).

23. Referencing claim 9, as closely interpreted by the Examiner, Tunncliffe teaches the growth trend is based on a regression of data representative of a past growth of the utilization of the network , (e.g., col. 4, lines 20 – 59, col. 5, lines 4 – 55).

24. Referencing claim 10, as closely interpreted by the Examiner, Tunncliffe teaches determining a total demand of users (TUD) for the network at each of the future times is a function of determining a present demand of users (PUD) for the network and determining a change in demand of users (CUD) for the network between a present time and each of the future times , (e.g., col. 4, lines 20 – 59, col. 5, lines 4 – 55).

Art Unit: 2143

25. Referencing claim 11, as closely interpreted by the Examiner, Tunncliffe teaches determining an anticipated change in demand of users (CUD) for the network comprises determining a demand requirement for a roll-out of an application operating via the network , (e.g., col. 4, lines 20 – 59, col. 5, lines 4 – 55).

26. Referencing claim 12, as closely interpreted by the Examiner, Tunncliffe teaches determining a predicted utilization (PU) of the network at each of the future times comprises dividing the total demand of users (TUD) for the network by the total capacity of the network (TNC) at each of the future times , (e.g., col. 4, lines 20 – 59, col. 5, lines 4 – 55).

27. Referencing claim 13, as closely interpreted by the Examiner, Tunncliffe teaches the acceptable utilization of the network is a function of a response time of an application operating via the network , (e.g., col. 3, lines 22 – 55).

28. Referencing claim 14, as closely interpreted by the Examiner, Tunncliffe teaches the response time of the application is a function of one or more of the following:

29. a distance between a client and a server of the application wherein said client and server are coupled to the network, a connection speed of the client to the network, or a utilization of the network during a period of time at which the client accesses the application , (e.g., col. 4, lines 20 – 59, col. 5, lines 4 – 55).

Art Unit: 2143

30. Referencing claim 15, as closely interpreted by the Examiner, Tunnicliffe teaches planning a budget for applying the determined change in network capacity (DCNC) to the network and determining a cost measure of the determined change in network capacity (DCNC), (e.g., col. 4, lines 20 – 59, col. 5, lines 4 – 55).

31. Claims 16 – 41 are rejected in the same light as the above claims and their teachings can also be found in the above cited areas of the prior art.

Conclusion

32. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

33. a. Fletcher et al. U.S. Patent No. 6269401 discloses Integrated computer system and network performance monitoring.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David E. England whose telephone number is 571-272-3912. The examiner can normally be reached on Mon-Thur, 7:00-5:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on 571-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2143

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

David E. England
Examiner
Art Unit 2143

DE



DAVID WILEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100